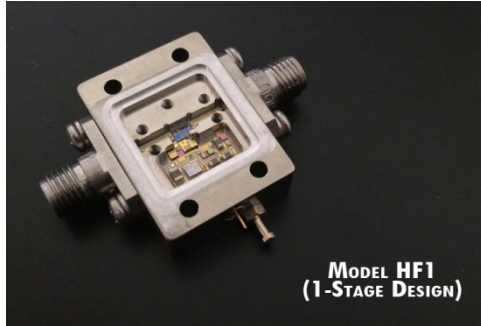


High Frequency Microwave Amplifier

Frequency Range: 6-12 GHz



Features

- High Frequency and Broad Bandwidth: 6-12 GHz
- Low Noise Figure: 3.0 dB Typical
- Laser Welded Housing for Ultimate Environmental Protection
- Internal Voltage Regulator
- RoHS Compliant Option: Model BXHF1087LF

Model BXHF1087 is a high frequency amplifier covering 6 to 12 GHz. This design utilizes a laser sealed housing for superior environmental protection. This standard design may also be ordered in a screened MIL-STD-883 version (Model #SXHF1087.) All specification ratings are based on measurements in a 50 Ω (ohm) system with a DC supply voltage tolerance of +/- 2%.

Technical Specifications

Parameter	Unit	Typical	Min/Max
Frequency Range	GHz	6-12	6-12
Gain	dB	22.5	21
Noise Figure	dB	3.0	4.0
Output Power @ 1 dB Compression	dBm	9	8
Output 3 rd Order Intercept	dBm	18	-
Output 2 nd Order Intercept	dBm	27	-
Reverse Isolation	dB	35	-
Input VSWR	---	1.5:1	2.0:1
Output VSWR	---	1.5:1	2.0:1
Supply Voltage	volts	+5	+5
Supply Current	mA	150	175

Maximum Ratings

Maximum (No Damage) Ratings	
Storage Temperature	-55°C to +85°C
Operating Temperature	-40°C to +85°C
DC Voltage @ 25°C	+8 volts
Input Drive @ 25°C (CW)	+13 dBm

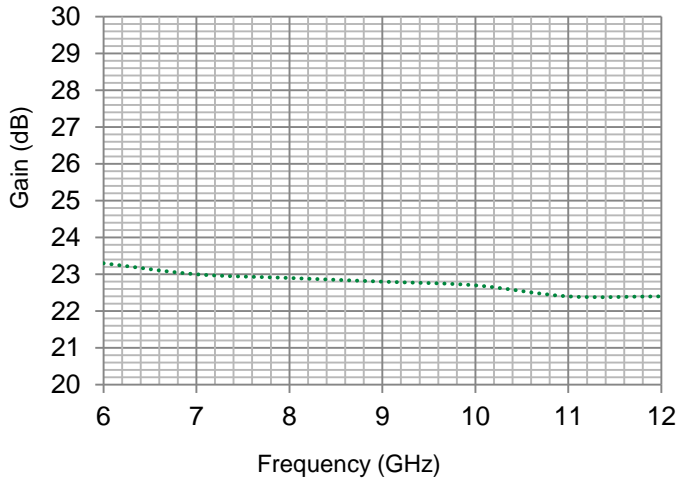
* Typical values are measured at 25°C, but not guaranteed.

Mechanical & Electrical

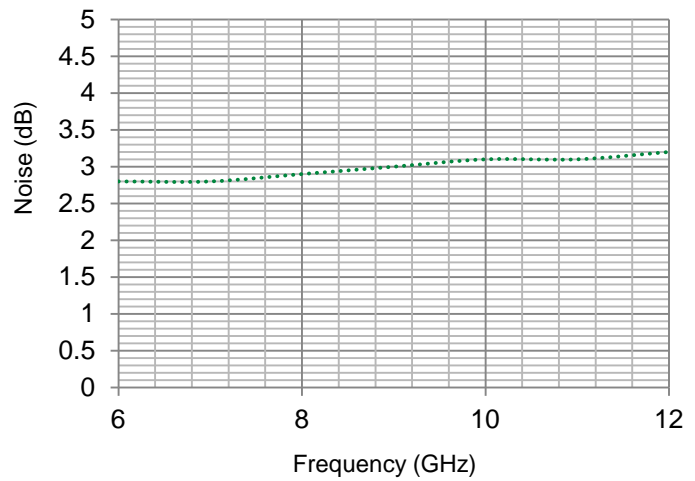
Parameter	Specification
Specification Temperatures (Min/Max)	-20°C to +70°C
Housing Size	0.870" L x 1.060" W x 0.300" H
Housing Drawing	HF1 Package
RF Connectors	SMA Female Replaceable Connectors

Typical Performance Graphs

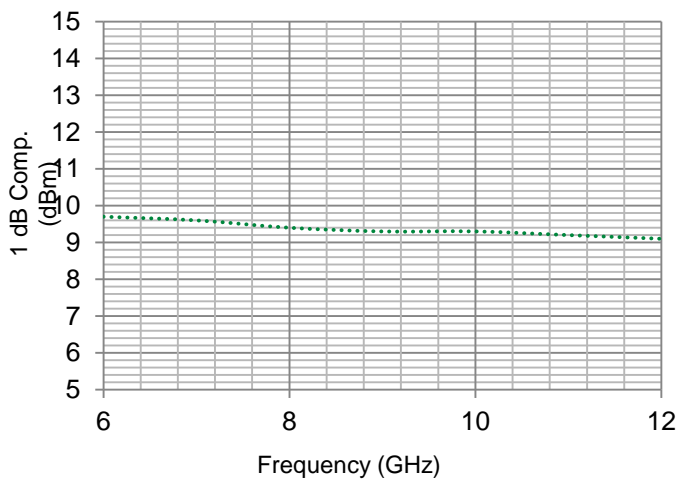
Gain (dB)



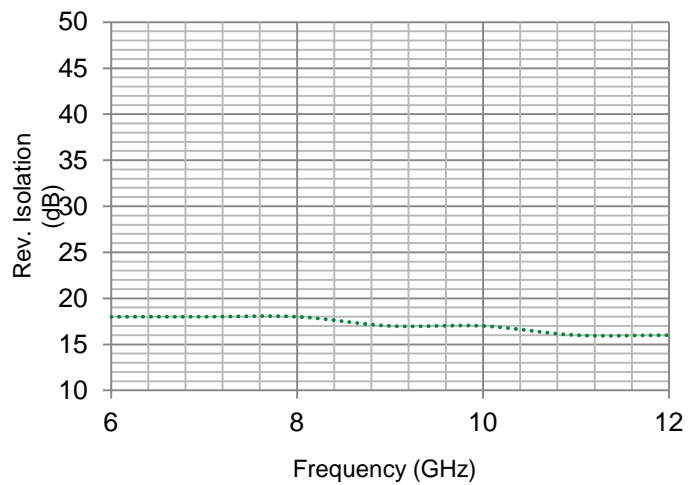
Noise Figure (dB)



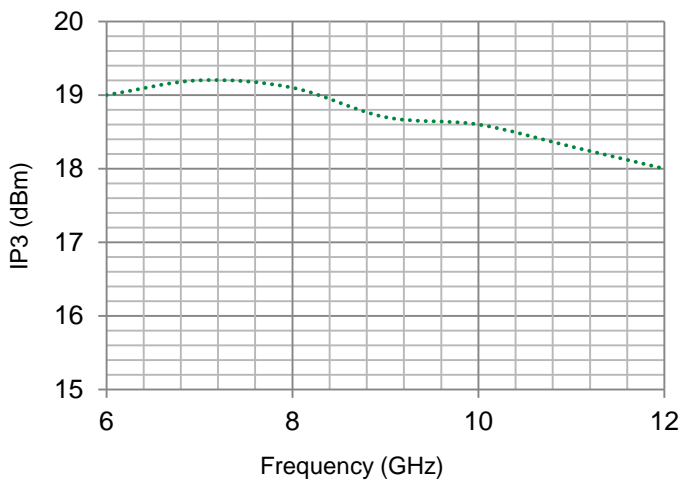
1 dB Compression (dBm)



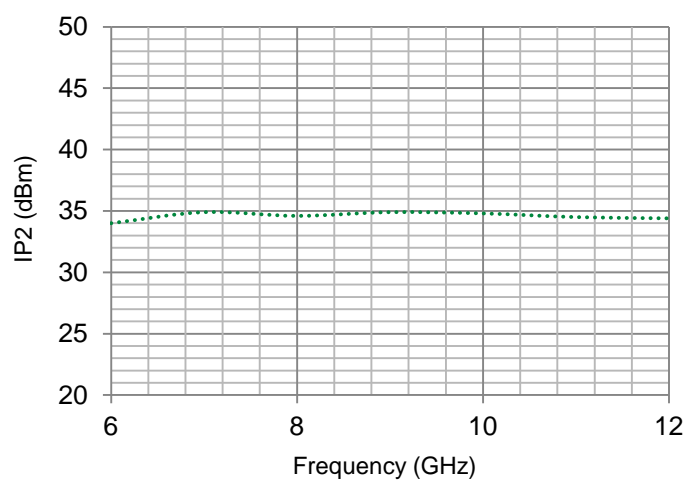
Reverse Isolation (dB)



3rd Order Intercept (dBm)

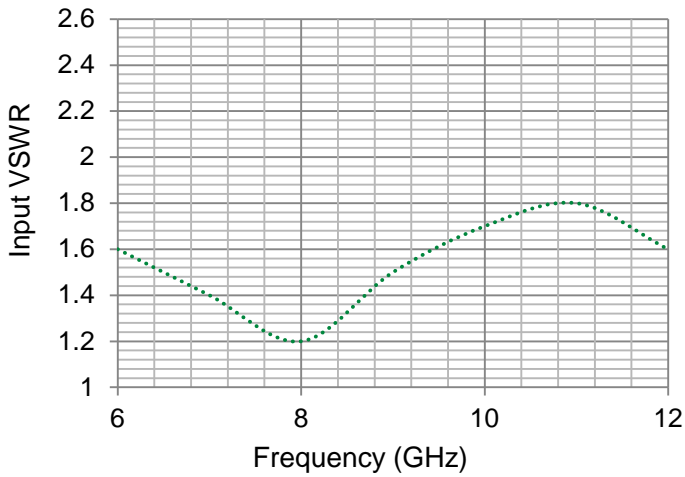


2nd Order Intercept (dBm)

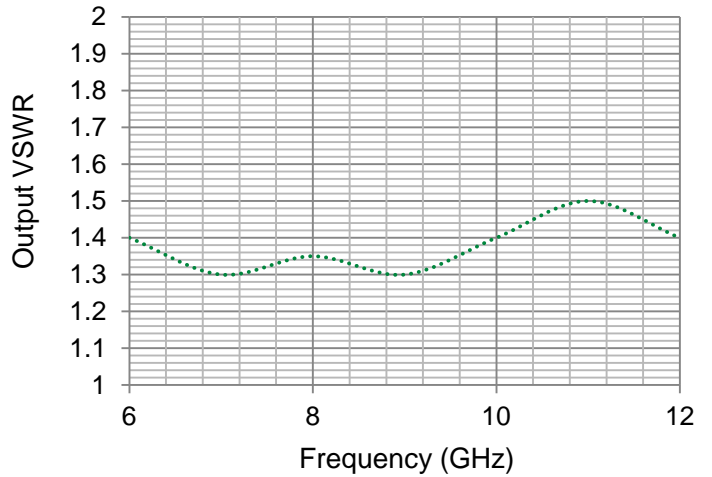


Typical Performance Graphs

Input VSWR



Output VSWR



Instructions

Grounding Instructions	Care should be taken to effectively ground each unit.
Revisions	API reserves the right to make revisions to both product and/or the information contained within their datasheets without advanced notice.
Min./Max. Values	Specifications are guaranteed when tested in a 50 Ω (ohm) system.
Typical performance graphs and values are measured at 25°C, but not guaranteed.	

Outline Drawing

NOTES:

- HOUSING & SEAL COVER ALUMINUM, COVER IS LASER WELDED TO FORM A HERMITIC SEAL.
HOUSING: IS NICKEL PLATED PER AMS-C-26074 CLASS 3, GRADE B.
WELD COVER: CHEMICAL FILM MIL-DTL-5541, TYPE II CLASS 3

